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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,885	11/08/2001	Wayne D. Dettloff	9069-2CT	4231
20792	7590	01/14/2004	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC			CLINGER, JAMES C	
PO BOX 37428			ART UNIT	
RALEIGH, NC 27627			PAPER NUMBER	
			2821	

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/010,885	DETTLOFF ET AL. <i>ju</i>	
	Examiner	Art Unit	
	Jim Clinger	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9,26 and 28-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-9 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) 28-31 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10-1-02. 6) ☐ Other: _____

DETAILED ACTION

Restriction/Election

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1, 3-9 and 26, drawn to a wireless power projecting device, classified in class 343, subclass 866.
 - II. Claims 28-31, drawn to a system for identifying an identification tag, classified in class 283, subclass 74.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case a completely different type of power projecting system can be used to identify a plurality of RF identification tags and; also, the power projecting system can be used for other processes.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Mitch Bigel on January 7, 2004 a provisional election was made with traverse to prosecute the invention of a wireless power projecting device, claims 1, 3-9 and 26. Affirmation of this election must be made by applicant in replying to this Office action. Claims 28-31 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 3, 9 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Alicot(6,081,238).

Claims 1 and 26, figure 22A discloses an array of in-phase current loops(314 & 316) that are disposed adjacent to one another to define a surface and to define a virtual current loop at a periphery of the surface that produces a same direction virtual current while current in adjacent portions of adjacent current loops flows in opposite directions, to thereby wirelessly project power from the surface(current arrows).

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Claim 3, the current loops of figure 22A comprise an array of at least two polygonal current loops(314 & 316) each having a plurality of sides.

Claim 9, the array of in-phase current loops(314 & 316) disclosed in figure 22A is arranged to provide at least some reinforcement of an electromagnetic near field that is produced by the current loops while producing at least some cancellation of a far field electromagnetic wave that is produced by the current loops.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alicot in view of Burghartz(6,452,413).

Alicot does not disclose all of the recited orientations of the loops in the loop array.

Claim 4, figure 2 of Burghartz discloses an array of in-phase current loops where the loops(2-5 & 6-9) are spiral current loops.

Claim 5, sizing each of the in-phase current loops disclosed in figure 2 of Burghartz to a quarter wavelength length would be obvious given the disclosure(col. 7, lines 15-20) concerning a very large operating band width of the device.

Claim 6, the current loops disclosed in figure 2 of Burghartz are an array of concentric current loops(2-5 & 6-9).

Claim 7, figure 3 of Burghartz discloses the array of in-phase current loops(2-5 & 6-9) being an array of stacked current loops.

Claim 8, a driver that drives the array of current loops at 13.56 Mhz to thereby wirelessly project power would be an obvious modification over the disclosure of Alicot(specification) and Burghartz(col. 7, lines 15-20) concerning operating frequency of the device.

The loop array geometry disclosed in Burghartz provides for an improved device(cols 3 & 4) including a device which is easier to construct(col. 3, lines 63-64).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the loop geometries disclosed in Burghartz for the loop elements disclosed in Alicot for an improved wireless device as disclosed in Burghartz.

Correspondence

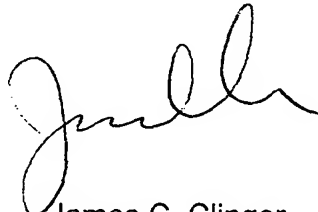
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Jim Clinger whose phone number is (703) 305-0619.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center whose telephone number is (703) 308-0956.

Papers related to Technology Center 2800 applications only may be

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submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center Fax Center number is (703) 872-9306.



James C. Clinger